WILDLIFE REHABILITATION CARE STANDARDS

General structure:

The facility must be constructed of materials that are safe and strong to enclose the animal in both indoor and outdoor facilities. All facilities will be maintained in good repair. Cages should be designed to minimize human contact with animals.

Indoor facilities for abandoned wildlife or wildlife undergoing medical treatment:

- 1. Wildlife that are injured, ill, or very young may be kept in small enclosures to restrict their activity.
- 2. Wildlife requiring a heat source (such as a heat lamp or heating pad) shall be given room enough in their enclosure to move away from or off the heat source as comfort dictates. Note: Infant or very young wildlife may require a constant heat source.
- 3. Cages shall have visual barriers to minimize the animal viewing humans and/or other species to reduce imprinting, socialization, habituation, or stress.
- 4. The ambient temperature shall remain reasonably constant and compatible with the health of the animal.
- 5. The rooms shall be well ventilated and free of drafts.
- 6. The rooms shall be well lit for the animal's comfort and ease in locating food, perches, etc., but cycled to the animal's normal photoperiodism. Lighting shall not be excessive or direct, and the animal should have access to a sheltered or darkened area in its enclosure.
- 7. All entrances to indoor facilities shall remain locked when unattended.

Outdoor facilities for rehabilitation of wildlife:

- 1. Safety:
 - a. The outdoor facilities shall be built with such materials and in such a manner as to be safe for the wildlife enclosed. There shall be no sharp objects, dangerous corners, points with steeply sloped banks, no toxic paints or stains, or poisonous vegetation.
 - b. A double-door or other protective device on doors (e.g., hanging tarp) shall be provided to reduce the chance of wildlife escaping when humans are entering or leaving the enclosure.

c. All outdoor facilities shall remain locked when unattended.

1. Dimensions:

- a. The outdoor facility shall be large enough to allow the species adequate space for exercise.
- b. See attached standards for individual species. Cubic footage (i.e., avian or arboreal species) or square footage (i.e., terrestrial species) equivalents may be substituted for specific dimension listed (unless noted).

2. Siding and roofing:

- a. Outdoor facilities for birds shall be well ventilated and shall be constructed of solid walls (consisting of wood, fiberglass, or their equivalent), nylon netting, or plastic-coated wire. No chicken wire, chain-link, or hardware cloth shall be used unless covered with vertical lathe, fiberglass screen, vertical doweling, nylon netting, burlap, or other suitable covering to keep birds from coming in direct contact with the wire.
- b. Siding shall be sunk below ground level, secured to a wood or concrete base, or otherwise attached to the flooring facilities that house carnivores (bear, coyote, fox, cougar, bobcat, lynx, raccoon, badger, skunk, fisher, marten, river otter, or weasel). Special precautions need to be taken with dangerous mammals such as bear and cougar to prevent them from seeing people. Cages must be designed so that food can be provided and cages cleaned without the animals seeing people (i.e., hatch doors to close animals off in separate cage sections).
- c. Artiodactyla (deer, mountain goat, mountain sheep, or elk) and carnivores (bear, coyote, fox, cougar, bobcat, lynx, raccoon, badger, skunk, fisher, marten, river otter, or weasel) shall be housed in outdoor facilities that restrict visual and audio contact with humans and domestic animals.

3. Flooring:

- a. Flooring shall be suitable for the species and can include concrete, gravel, woodchips, and natural ground.
- b. Perching birds must be given perches (blocks of wood, sticks, etc.) in the initial and recovering cage floor, allowing them to be elevated above their excrement. Consideration must be made for non-perching birds to avoid contamination with fecal material (i.e., net bottom pens for seabirds).

4. Cover:

- a. Outdoor facilities shall provide protected areas where wildlife can retreat from inclement weather, drafts, or direct sun.
- b. Dens or shelters shall be provided for lagomorphs (rabbits and hares), rodents, insectivores (shrews and moles), and carnivores.
- c. Visual barriers (e.g., shrubs or bamboo screens) shall be placed in outdoor facilities to allow the wildlife to retreat from human sight, or from other wildlife if housed in groups, to reduce imprinting or habituation to humans, and stress.

5. Perches for birds:

- a. Perches shall be the proper size for the species to perch comfortably.
- b. Perches shall be numerous and spaced to encourage exercise and to provide natural social spacing for grouped birds.
- c. Perches may be constructed of:
 - 1) Natural limbs.
 - 2) Wood doweling covered with ¼" Astroturf, hemp rope, or indoor/outdoor carpeting for raptors.
 - 3) Platforms covered with 1/4" Astroturf or indoor/outdoor carpeting for raptors.
 - 4) Bow, block, ring, or screen perches for raptors.

6. Grouping:

- a. Abandoned wildlife should be raised with others of their species whenever possible to ensure proper species imprinting.
- b. Incompatible species shall not be housed together.
- c. If several animals are housed together, they shall each have sufficient space for exercise and be able to maintain normal social distances from one another according to their species.

Special Note: Raptors being rehabilitated using falconry techniques may be kept in facilities as outlined in the falconry regulation.

Food:

- 1. All food for wildlife consumption shall be fresh or frozen, clean, and nutritious.
- 2. Type and amounts of food shall be appropriate to the species, age, and health of the animal.
- 3. Food receptacles shall be kept clean and sanitary, be an appropriate size for the species, and be easily accessible by the animal.
- 4. Wildlife shall be supplemented with vitamins and/or minerals as necessary for their health and growth at the advice of a licensed veterinarian.

Water:

- 1. Water provided to wildlife for drinking shall be fresh and uncontaminated.
- 2. Water receptacles shall be kept sanitary, safe for the animal's use, and not easily tipped over.
- 3. Water, separate from drinking, shall be provided for species requiring bathing, swimming, or misting necessary for its health, exercise, or behavioral needs.

Sanitation:

1. Worming protocols for roundworm control should be instituted under the guidance of a veterinarian to decrease the chances of *Toxacara sp* and *Baylis sp* transmission to humans. Feces should be disposed of in a safe manner.

Sanitation – Indoor Facilities:

1. Excreta shall be removed frequently from enclosures to prevent wildlife from becoming soiled and to minimize disease, flies and odors. Feces shall be handled with rubber gloves and feces contaminated bedding will be removed daily and disposed of by burying or burning, or treated with appropriate chemicals.

Sanitation – Outdoor Facilities:

- 1. Pens or runs using gravel, sand or dirt shall be sanitized regularly, and completely changed when necessary (depending on size of cage, number of animals contained, etc.), but no fewer than two changes per year.
- 2. Enclosures shall be sanitized after being occupied by any wildlife. Sanitizing may be done by washing with hot water (180 degrees F at source) and soap or detergent, or by washing all soiled surfaces with a detergent solution followed by a safe and effective disinfectant, or by cleaning all soiled surfaces with saturated live steam under pressure.

- 3. Drainage shall be adequate for rapid elimination of excess water from enclosure (both indoor and outdoor). If possible, drainage draining into another pen or pond should be avoided.
- 4. Quarantine areas shall be available to keep wildlife suspected to have an infectious or transmissible disease separate from other animals in the facility.
- 5. Trash and garbage shall be removed from the premises frequently to protect the health of the animals and to minimize flies and odors.
- 6. Pest controls shall be established that are safe and effective to eliminate insects and ectoparasites that might affect the health of the animals.

WILDLIFE REHABILITATION FACILITY STANDARDS

MEDIUM CARNIVORES: Raccoons

Minimum Cage Dimensions

W x L x H	Stage of Rehabilitation	<u>Number of Animals</u>		
3' x 3' x 3'	Injured	1 adult		
8' x 6' x 6'	Weaning	5 young		
8' x 12' x 8'	Weaned/Conditioning	2 young or 1 adult		
30' x 10' x 8'	Weaned/Conditioning	5 – 10 young		

<u>Cage Furniture:</u> Logs, stumps, hanging branches, pool, elevated platform or den.

Refuge: Den box.

Cover: Outdoor pens should be completely covered with chain-link roof with a

partial solid roof on top for shelter. Roofless cages are permitted if they are designed in a way that ensures security (i.e. solid wood fences with

metal flashing, beyond climbing range, etc.).

Flooring: Natural floor with buried wired, cement, or gravel.

Siding: Wood, or wood with chain-link fencing, welded wire, etc.

Other: There must be a visual barrier, such as plywood, on sides of cage from

which people approach, so that the animals do not see people.

LARGE CARNIVORES: Bears

Minimum Cage Dimensions

W x L x H	Stage of Rehabilitation	Number of Animals
·		

12' x 8' x 10' Injured 1 adult

16' x 8' x 10' Weaning 2 young

24' x 12' x 10' Weaned/Conditioning 2 young or 1 adult

<u>Cage Furniture:</u> Tires, logs, stumps, off-ground wooden platform, pool. Large enough for

bears to get in.

Refuge: Den box or culvert.

Cover: Outdoor pens should be completely covered with chain-link roof with a

partial solid roof on top for shelter. Roofless cages are permitted if they are designed in a way that ensures security (i.e., electric fences with

overhang).

Flooring: Cement or natural with buried walls if cage is 2x size of above minimum

standard.

Siding: Nine gauge chain-link fencing or concrete block. Sides of pen must be

buried in concrete base.

Other: There must be a visual barrier, such as plywood, on sides of cage from

which people approach, so that the animals do not see people.

LARGE CARNIVORES: Cougars

Minimum Cage Dimensions

W x L x H Stage of Rehabilitation Number of Animals

12' x 8' x 10' Initial Injury 1 adult

16' x 8' x 10' Weaning 2 young

32' x 20' x 10' Weaned/Conditioning 1 adult or 2 young

Cage Furniture: Logs, stumps, off-ground wooden platform.

Refuge: Den box or culvert.

Cover: Outdoor pens should be completely covered with chain-link roof with a

partial solid roof on top for shelter. Roofless cages are permitted if they are designed in a way that ensures security (i.e., electric fences with

overhang, etc.)

Flooring: Natural floor or cement.

Siding: Concrete block or 9-gauge chain-link fencing, sides of pen must be buried

in concrete base.

Other: There must be a visual barrier, such as plywood, on sides of cage from

which people approach, so that the animals do not see people.

LARGE CARNIVORES: Coyotes, Foxes

Minimum Cage Dimensions

W x L x H Stage of Rehabilitation Number of Animals

3' x 4' x 3' Injured 1 adult

8' x 8' x 8' Weaning 2 young

16' x 8' x 8' Weaned/Conditioning 2 young or 1 adult

<u>Cage Furniture:</u> Logs, stumps, off-ground wooden platform with ramp, pool.

Refuge: Den box or culvert.

Cover: Outdoor pens should be completely covered with chain-link roof with a

partial solid roof on top for shelter. Roofless cages are permitted if they are designed in a way that ensures security (i.e., electric fences with

overhang, etc.).

Flooring: Natural floor with buried wire.

Siding: Nine gauge chain-link fencing, or solid wood walls.

Other: There must be a visual barrier, such as plywood, on sides of cage from

which people approach, so that the animals do not see people.

SMALL CARNIVORES: Lynx, Bobcat

Minimum Cage Dimensions

W x L x H	Stage of Rehabilitation	Number of Animals

6' x 6' x 6' Injured adult 1 adult

8' x 6' x 6' Weaning 2 young

24' x 12' x 10' Weaned/Conditioning 2 young or 1 adult

Cage Furniture: Logs, stumps, hanging branches, rocks, and elevated platform.

Refuge: Den box.

Cover: Outdoor pens should be completely covered with chain-link roof with a

partial solid roof on top for shelter. Roofless cages are permitted if they are designed in a way that ensures security (i.e., electric fences with

overhang, etc.)

Flooring: Natural floor with buried wire, cement, or gravel.

Solid wood or chain-link fencing. Siding must be buried in ground or

concrete or attached to floor.

Other: There must be a visual barrier, such as plywood, on sides of cage from

which people approach, so that the animals do not see people.

SMALL MAMMALS: Muskrat, Mink, Weasel, Marten, Skunk

Minimum Cage Dimensions

W x L x H Stage of Rehabilitation		Number of Animals		
2' x 2' x 2'	Initial injury	1 adult		
3' x 3' x 3'	Weaning	2 young		
6' x 4' x 6'	Weaned/Conditioning	2 young, 1 adult		

<u>Cage Furniture:</u> Logs, stumps, hanging branches. Muskrat and mink need pool.

Refuge: Den box.

Cover: Outdoor pens should be completely covered with chain-link roof with a

partial solid roof on top for shelter. Roofless cages are permitted if they are designed in a way that ensures security (e.g., electric fences with

overhang, etc.).

Flooring: Cement, gravel, or natural floor with sunken buried wire.

Solid wood or small diameter chain-link fencing. Siding must be buried in

ground or concrete or attached to floor.

Other: There must be a visual barrier, such as plywood, on sides of cage from

which people approach, so that the animals do not see people.

MEDIUM-SIZED MAMMALS: Beaver, River Otter, Badger, Porcupine, Fisher

Minimum Cage Dimensions

W x L x H	Stage of Rehabilitation Number of Ani	
3' x 4' x 3'	Injured	1 adult
8' x 6' x 6'	Weaning	2 young
12' x 8' x 6'	Weaned/Conditioning	2 young, 1 adult

<u>Cage Furniture:</u> Logs, stumps, pool for beavers and river otters 6' x 4' x 4' deep.

Refuge: Den.

Cover: Outdoor pens should be completely covered with chain-link roof with a

partial solid roof on top for shelter. Roofless cages are permitted if they are designed in a way that ensures security (i.e., electric fences with

overhang, etc.).

Flooring: Cement, gravel, or natural floor with sunken buried wire.

Solid wood* or chain-link fencing. Siding must be buried in ground or

concrete or attached to floor.

Other: There must be visual barrier on sides of cage from which people approach,

so that the animals do not see people.

Nursing mammals with eyes closed may be housed in incubators, aquariums or pet carriers. All other mammals should be housed according to the charts listed above.

* Not for beavers, they can chew through wood.

ARTIODACTYLA: Deer, Elk, Mountain Goat, Mountain Sheep

Minimum Cage Dimension

W x L x H Stage of Rehabilitation Number of Animals

8' x 8' x 6' Injured 1 adult

20' x 15' x 6' Weaning 3 young

104' x 104' Weaned/Conditioning 6 young, or 3 adults

(Approximately ¼ acre)

<u>Cage Furniture:</u> Logs, vegetation.

Refuge: Den.

Cover: A solid roofed area should be provided.

Flooring: Natural ground.

Solid wood or covered chain-link fencing.

Other: There must be a visual barrier, such as plywood, on sides of cage from

which people approach, so that the animals do not see people.

LAGOMORPHS: Hares, Rabbits, Pikas

Minimum Cage Dimensions

$W \times L \times H$	Stage of Rehabilitation	Number of Animals	
15 gal. aquarium			
to 2' x 2' x 2'*	Injured	1 adult	
15 gal. aquarium to 3' x 3' x 3'*	Weaning	3 young	
3' x 3' x 3' to 8' x 6' x 6'*	Weaned/Conditioning	6 young, or 3 adults	

^{*} snowshoe rabbits and jackrabbits require the larger cage sizes.

<u>Cage Furniture:</u> Vegetation.

Refuge: Den.

Cover: Cage should be in covered area or have partial shelter roof. Cage

should be safe from predators.

Flooring: Solid or natural ground with buried wire.

Other: Cage should be in a quiet area, and covered in a way so that

animals do not see people.

RAPTORS

<u>Species</u>	Confinement (W x L x H)	Recovery (W x L x H)	Conditioning (W x L x H)	
Cooper's Hawk	22'xx22'xx22'	8' x 8'4k' &'4' x 4'	15' x 8' k 58'x 8' x 8'	
Sharp-shinned	44	44	44	
Hawk	44	44	44	
Merlin	44	44	44	
Kestrel	44	44	44	
Burrowing Owl	44	44	44	
Screech Owl	44	46	44	
Saw-whet Owl	"	44	"	
Flammulated Owl	"	44	"	
Pygmy Owl	44	66	"	
Red-tailed Hawk	2' x 2' x 2'	8' x 8' x 8'	20' x 10' x 10'	
Rough-legged	"	46	44	
Hawk	44	44	44	
Swainson's Hawk	66	46	66	
Harrier	44	44	44	
Ferruginous Hawk	"	46	44	
Goshawk	44	44	44	
Gyrfalcon	44	44	44	
Prairie Falcon	44	44	44	
Peregrine Falcon	44	44	44	
Horned Owl	44	44	44	
Spotted Owl	44	44	44	
Barrel Owl	44	44	44	
Long-eared Owl	44	44	44	
Short-eared Owl	44	44	44	
Barn Owl	"	66	"	
Bald Eagle	3' x 3' x 3'	8'x 8 ' x 8'	20' x 50' x 15'	
Golden Eagle	44	44	"	
Osprey	44	"	"	
Turkey Vulture	44	44	66	

Flooring:

Natural ground, pea-gravel or sand. Any concrete base must be covered with gravel. Newspaper where appropriate.

Initial Care Facilities:

Large or medium size vari-kennels or disposable cardboard boxes of proper dimension may be utilized. Small ½ round logs placed on cage bottom promote cleanliness.

Note: Cubic footage equivalents may be substituted for specific dimensions listed. However, minimum height for conditioning small raptors is 6 feet; medium raptors 8 feet; and large raptors 10 feet.

NON-RAPTOR AVIAN SPECIES

These minimum standards were originally developed in 1988 by the National Wildlife Rehabilitators Association and the International Wildlife Rehabilitation Council (prs. comm. E. Thrune, 1988). They have been updated in 1996 based on NWRA/IWRC minimum standards and input from Washington wildlife rehabilitators. Although considerable thought and experience determined the cage sizes listed in this program, it is impossible to consider all possibilities in terms of material, design, or size. Since exterior plywood is available in economical and easy to use 4' x 8' sheets, some caging standards have been calculated, using numbers that are based on material size. Maximum volume is achieved with cubic cages. Cage sizes specify minimums, but it is best to give the birds the maximum amount of space. Consequently, cages should be built using the size designed for the largest species to be housed, since they will be reused with different species at different times. Additionally, birds cannot be assigned cage sizes by species, due to variations within species. For example, the Canada goose has at least seven races that are identifiable by size. They range from the giant, which has a sixfoot wingspread and breeds in Missouri, to the small mallard size that breeds near the Arctic Circle and winters in California. For this reason, non-raptorial species are housed according to their general size (in this instance, the height of the bird).

Cubic footage equivalents may be substituted for specific dimensions listed.

> = Greater Than

 \sim = Approximately

Housing systems should provide for space that is adequate to permit freedom of movement and normal postural adjustments.

'= Feet

< = Than

"= Inches

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<u>Species</u>	Height in Inches of the Bird	Temporary Confinement (W x L x H)	Recovery (W x L x H)	Conditioning	Codes
Loons	~24	2' x 2' x 2'	4' x 4' x 8'	Pool min. 50 cu. ft.	Sl, W, B
Grebes	<9	1' x 1' x 1'	1.5' x 1.5' x 1.5'	Pool min. 50 cu. ft.	S, F, B
	>9	1.5' x 1.5' x 1.5'	2' x 2' x 2'	Pool min. 50 cu. ft.	Sl, W, B
Petrels and Shearwaters	<12	1' x 1' x 1'	1.5' x 1.5' x 1.5'	Pool min. 50 cu. ft.	S, P, F, B
	<18	1.5' x 1.5' x 1.5'	2' x 2' x 2'	Pool min. 50 cu. ft.	Pi, Sl, F, B
	>18	3' x 3' x 3'	4' x 4' x 4'	Pool min. 50 cu. ft	W, Sl, F, B

_	nt in Inches of the Bird	Temporary Confinement (W x L x H)	Recovery (W x L x H)	Conditioning	Codes
Pelicans and Cormorants	<36	3' x 3' x 3'	4' x 4' x 4'	Pool min. 90 cu. ft	Pi, Sl, F
	>36	4' x 4' x 4'	4' x 4' x 8'	Pool min. 90 Cu. ft.	Pi, Sl, F
Bitterns, Herons and	<20	2' x 2' x 2'	2' x 2' x 2'	4' x 4' x 8'	S, P, F, Q
Egrets	>20	3' x 3' x 3'	3' x 3' x 4'	8' x 8' x 8'	S, P, F, Q
Geese	<30	3' x 3' x 3'	4' x 4' x 6'	8' x 10' x 8'	S, F
Swans	>30	4' x 4' x 3'	4' x 8' x 6'	20' x 10' x 6'	Sl, F, Q, H
Diving Ducks and Aicids	<20	2' x 2' x 2'	2' x 3' x 2'	Pool min. 50 cu. ft.	В
Dabbling Ducks	<20	2' x 2' x 2'	2' x 3' x 2'	8'x 4' x 8'	S
Pheasant and Quail	<20	2' x 2' x 2'	3' x 3' x 3'	4' x 4' x 6'	Н
	>20	3' x 3' x 3'	4' x 4' x 8'	4' x 4' x 6'	Н
Rail, Coots and	<9	1' x 1' x 1'	1.5' x 1.5' x 1.5'	4' x 8' x 4'	H, S
Cranes	>9	1.5' x 1.5' x 1.5'	2' x 2' x 2'	4' x 8' x 8'	H, S
	>15	3' x 3' x 3'	4' x 8' x 8'	8' x 16' x 8'	H, S
Gulls, Terns, Plovers,	<9	1' x 1' x 1'	1.5' x 1.5' x 1.5'	4' x 8' x 8'	H, Pi, S
Sandpipers and	<15	1.5' x 1.5' x 1.5'	2' x 2' x 2'	4' x 8' x 8'	H, Pi, S
Aicids	15-20	2' x 2' x 2'	3' x 3' x 3'	8' x 8' x 8'	H, Pi, S
	>20	3' x 3' x 3'	4'x 4' x 4'	16' x 8' x 8'	H, Pi, S
Pigeons and Doves	>9	2' x 2' x 2'	2' x 2' x 2'	8' x 8' x 6'	P
Night Hawks and Goat Suckers	~9	2' x 2' x 2'	2' x 2' x 2'	8' x 10' x 6	P

<u>Species</u>	Height in Inches of the Bird	Temporary Confinement (W x L x H)	Recovery (W x L x H)	Conditioning	Codes
Humming-birds and Swift	<9	1' x 1' x 1'	1' x 1' x 1'	4' x 6' x 6'	P, C, Z
Kingfishers	<9	1' x 1' x 1'	1.5' x 1.5' x 1.5'	4' x 8' x 8'	S, Pi, C, D
Woodpeckers	<9	1' x 1' x 1'	1.5' x 1.5' x 1.5'	4' x 8' x 8'	C, D
	>9	2' x 2' x 2'	2' x 2' x 2'	16' x 8' x 8'	C, D
Perching and Song Birds	g <9	1' x 1' x 1'	1.5' x 1.5' x 1.5'	4' x 6' x 6'	P
	9-15	1.5' x 1.5' x 1.5'	2' x 2' x 2'	8' x 8' x 8'	P
	>15	2' x 2' x 2'	3' x 3' x 3'	16' x 8' x 8'	P
Crow	<10	2' x 2' x 2'	4' x 4' x 4'	15' x 8' x 8'	P
Raven	<10	2' x 2' x 2'	4' x 4' x 4'	20' x 10' x 10'	P

Codes for Special Caging Requirements

- B Kept on water, if waterproofed.
- C Birds such as woodpeckers and nuthatches require angled and/or vertical logs for climbing. Provide suitable materials (e.g. towels without strings) for clinging birds such as chimney swifts.
- D Birds with this designation require old logs, etc., as drumming materials.
- F Special substrate needed. These species are susceptible to foot problems. Depending on species, padding flooring, towels, sheeting, carpets, kitty litter, natural ground, sand, crumpled newspaper covered with toweling, sand or suspended net flooring may be used. Concrete must be covered.
- H Hides; provide natural vegetative material or man-devised areas for cover
- P Requires two or more perches of varied diameter.
- Pi Piling or covered shelves required for perching.
- Q Quiet, and extreme privacy required.
- S Bathing area required for appropriate bird size
- Sl Swimming area, large pool (deeper than 2'), tank, pond. Provide a resting platform in any of these swimming areas.
- W Use waterbed, suspended netting, sheepskin padding, or crumpled newspapers (6" deep minimum) covered with towels.
- Z Although larger conditioning cage sizes are preferred for hummingbirds, great care must be taken to seal off small openings or cracks that can act as traps.

